



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|---------|-------------|-------------------------|---------------------|------------------|
| 10/632,776 | • | 08/01/2003 | Stephen E. Terry | I-2-0378.1US | 3653 |
| 24374 | 7590 | 01/30/2006 | | EXAMINER | |
| VOLPE A | ND KOE | ENIG, P.C. | RIVERO, AL | RIVERO, ALEJANDRO | |
| DEPT. ICC UNITED P | | ЛТЕ 1600 | ART UNIT | PAPER NUMBER | |
| 30 SOUTH | | | 2684 | | |
| PHILADEL | PHIA, P | A 19103 | DATE MAILED: 01/30/2006 | : | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|--|---|--|-------------------|--|--|--|
| | | 10/632,776 | TERRY, STEPHEN E. | | | |
| | Office Action Summary | Examiner | Art Unit | | | |
| | | Alejandro Rivero | 2684 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) ズ | Responsive to communication(s) filed on <u>01 A</u> | ugust 2003. | | | | |
| , | • | action is non-final. | | | | |
| • | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-28 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Applicati | on Papers | | | | | |
| 9)⊠ The specification is objected to by the Examiner. 10)⊠ The drawing(s) filed on <u>01 August 2003</u> is/are: a) accepted or b)⊠ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11)□ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 2) Notice Notice 3) Information | t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | | | | |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because of the following informalities:

In line 8, replace "increase" with "increased". Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities:

In lines 2-3 of paragraph [0030] (page 5) replace "is adjusted to the minimum required power to the minimum required power necessary" with "is adjusted to the minimum required power necessary". Appropriate correction is required.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: step 24 of figure 1 and element 48 of figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

Application/Control Number: 10/632,776 Page 3

Art Unit: 2684

informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 1, 4, 9, 15 and 21-28 are objected to because of the following informalities:

In claim 1 line 11, the examiner respectfully suggests replacing "increase" with "increased".

In claim 4 line1, the examiner respectfully suggests replacing "send" with "sent".

In claim 9 line 10, the examiner respectfully suggests replacing "increase" with "increased".

In claim 15 line 9, the examiner respectfully suggests replacing "increase" with "increased".

In claims 21-28, the examiner respectfully suggests replacing all occurrences of "WTRU" with "wireless transmit/receive unit" so that the name is used uniformly throughout the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claim 21 recites the limitation "if all of the plurality of WTRUs *fall below* their quality requirement, the transmission power level is decreased" in lines 10-12. There is insufficient antecedent basis in the disclosure for this limitation in the claim. For the

purpose of this examination, claim 21 will be treated as reciting "if all of the plurality of WTRUs *exceed* their quality requirement, the transmission power level is decreased" instead of "if all of the plurality of WTRUs *fall below* their quality requirement, the transmission power level is decreased".

7. Claim 25 recites the limitation "if all of the plurality of WTRUs *fall below* their quality requirement, the transmission power level is decreased" in lines 9-11. There is insufficient antecedent basis in the disclosure for this limitation in the claim. For the purpose of this examination, claim 25 will be treated as reciting "if all of the plurality of WTRUs *exceed* their quality requirement, the transmission power level is decreased" instead of "if all of the plurality of WTRUs *fall below* their quality requirement, the transmission power level is decreased".

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 9. Claims 1, 4-9, 12-15, and 18-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Naito (US 6,728,226 B1).

Consider claim 1, Naito discloses a method for transferring data in a wireless communication system (Abstract), the method comprising: transmitting data over a

particular channel from a transmitter to a plurality of receivers (Abstract); receiving the particular channel at the plurality of receivers (Abstract); each of the receivers sending power control information to the transmitter based on a measured reception quality and a reception quality requirements of each receiver (Abstract, column 9 lines 21-28, column 10 lines 25-28 and 35-38); the transmitter using the power control information from each receiver and adjusting a transmission power level of the particular channel so that if any receiver requires an increase in the transmission power level to meet that receiver quality requirement, the transmission power level is increased (Column 10 lines 35-38) and if all receivers exceed their quality requirement, the transmission power level is decreased (Column 8 lines 34-39, column 9 lines 17-20 and 35-44).

Consider claim 9, Naito discloses a base station for transferring data over a particular channel to multiple users (Abstract), the base station comprising: a transmitter and an antenna for producing a particular channel for transmission to a plurality of users simultaneously (Abstract, column 6 lines 47-49, figure 1A element 10); a power control receiver for receiving power control information from each of the users (Abstract, column 6 lines 49-51, figure 1A element 13); and a transmit power control device for using the power control information from each of the plurality of users and adjusting a transmission power level of an amplifier of the particular channel (Abstract, column 6 lines 51-58, figure 1A elements 14, 16 and 17) so that if any user requires an increase in the transmission power level, the transmission power level is increased (Column 10 lines 35-38) and if all users exceed their quality requirement, the transmission power level is decreased (Column 8 lines 34-39, column 9 lines 17-20 and 35-44).

Consider claim 15, Naito discloses a base station for transferring data over a particular channel to multiple users (Abstract), the base station comprising: means for producing a particular channel for transmission to a plurality of users simultaneously (Abstract, column 6 lines 47-49, figure 1A element 10); means for receiving power control information from each of the users; and means for using the power control information from each of the plurality of users (Abstract, column 6 lines 49-51, figure 1A element 13) and adjusting a transmission power level of an amplifier of the particular channel (Abstract, column 6 lines 51-58, figure 1A elements 14, 16 and 17) so that if any user requires an increase in the transmission power level, the transmission power level is increased (Column 10 lines 35-38) and if all users exceed their quality requirement, the transmission power level is decreased (Column 8 lines 34-39, column 9 lines 17-20 and 35-44).

Consider claims 4, 12 and 18, Naito discloses all the limitations as applied to claims 1, 9 and 15 above and also discloses wherein the power control information received from each user is transmit power control commands (Column 10 lines 35-38, reads on claims 4, 12 and 18).

Consider claims 7, 8, 13, 14, 19 and 20, Naito et al. discloses all the limitations as applied to claims 1, 9 and 15 above and also discloses wherein for each of the receivers (which includes "at least one of the receivers"), the particular channel has an associated dedicated (discrete) channel and the measured reception quality is of the associated dedicated channel (Abstract, column 2 lines 22-26, column 7 lines 6-8,

Page 7

column 8 lines 34-39, column 9 lines 17-20 and 35-44, column 10 lines 35-38, figure 1B element 20, reads on claims 24 and 28).

Consider claim 21 and the 35 U.S.C. 112 (2nd paragraph) rejection above, Naito discloses a wireless transmit/receive unit (WTRU) (mobile station) for receiving data over a particular channel (Abstract), the WTRU comprising: a receiver for receiving the particular channel, the particular channel being received by a plurality of WTRUS simultaneously (Abstract, column 7 lines 6-8, figure 1B element 20); a power control information generator for sending power control information based on a measured reception quality and a reception quality requirements of the WTRU (Abstract, column 7 lines 10-16, column 9 lines 17-20, figure 1B elements 24, 25 and 26); and wherein the particular channel has a transmission power level set so that if any of the plurality of WTRUS requires an increase in the transmission power level to meet that reception quality requirement, the transmission power level is increased (Column 10 lines 35-38) and if all of the plurality of WTRUS exceed their quality requirement, the transmission power level is decreased (Column 8 lines 34-39, column 9 lines 17-20 and 35-44).

Consider claim 25 and the 35 U.S.C. 112 (2nd paragraph) rejection above, Naito discloses a wireless transmit/receive unit (WTRU) (mobile station) for receiving data over a particular channel (Abstract), the WTRU comprising: means for receiving the particular channel, the particular channel being received by a plurality of WTRUS simultaneously (Abstract, column 7 lines 6-8, figure 1B element 20); means for sending power control information based on a measured reception quality and a reception quality requirements of the WTRU (Abstract, column 7 lines 10-16, column 9 lines 17-

20, figure 1B elements 24, 25 and 26); and wherein the particular channel has a transmission power level set so that if any of the plurality of WTRUS requires an increase in the transmission power level to meet that reception quality requirement, the transmission power level is increased (Column 10 lines 35-38) and if all of the plurality of WTRUS exceed their quality requirement, the transmission power level is decreased (Column 8 lines 34-39, column 9 lines 17-20 and 35-44).

Consider claims 5, 22 and 26, Naito discloses all the limitations as applied to claims 1, 21 and 25 above and also discloses wherein the measured reception quality is a signal to interference ratio and the reception quality requirement is a target signal to interference ratio (Column 1 line 31-49, reads on claims 5, 22 and 26).

Consider claims 6, 23 and 27, Naito et al. discloses all the limitations as applied to claims 1, 21 and 25 above and also discloses wherein the measured reception quality is a reception quality of the particular channel (Abstract, column 8 lines 34-39, column 9 lines 17-20 and 35-44, column 10 lines 35-38, reads on claims 6, 23 and 27).

Consider claims 24 and 28, Naito et al. discloses all the limitations as applied to claims 21 and 25 above and also discloses a dedicated channel receiver/means for receiving a dedicated channel and wherein the measured reception quality is of the dedicated channel (Abstract, column 2 lines 22-26, column 7 lines 6-8, column 8 lines 34-39, column 9 lines 17-20 and 35-44, column 10 lines 35-38, figure 1B element 20, reads on claims 24 and 28).

Application/Control Number: 10/632,776

Art Unit: 2684

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 12. Claims 2, 3, 10, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naito in view of Das et al. (US 2003/0157953 A1).

Consider claims 2, 3, 10, 11, 16 and 17, Naito discloses all the limitations as applied to claims 1, 9 and 15 above.

However, Naito does not disclose wherein the particular channel is a shared channel (as in claims 2, 10 and 16) or a high-speed shared channel (as in claims 3, 11 and 17).

Das et al. disclose wherein the particular channel is a shared channel (Abstract, paragraphs [0010] and [0027], reads on claims 2, 10 and 16), more specifically a high-speed shared channel (Abstract, paragraphs [0010] and [0027], reads on claims 3, 11 and 17).

Application/Control Number: 10/632,776 Page 10

Art Unit: 2684

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a high-speed shared channel as taught by Das et al. in the method and base station taught by Naito in order to perform flexible and versatile signaling and prevent the need to traverse a backhaul path between the base station and its respective base station controller (as suggested by Das et al. in the abstract, paragraphs [0011] and [0028]).

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alejandro Rivero whose telephone number is (571) 272-2839. The examiner can normally be reached M-F, 8:30AM-5:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR